Wildland Hoselays

Students will understand the basic types of hoselays and their uses. Students will also understand the basics of hoselay tactics and safety considerations.

I. Hose evolution or hoselay definition

- A. Extending hose from the engine to the fire, exposure, or water source which allows delivery of water safely and effectively with sound hydraulics and procedures

II. The evolution of wildland hose laying methods.

- A. Most early versions involved various packs for transporting rolled hose
- B. The Cleveland Hose Pack
  1. Was the first widely used hose pack
  2. Bulky and required lots of equipment to function including a pack board
  3. Pictured in Water Handling Equipment Guide pg. 98
- C. Plumas, Gansner and Gnas Packs
  1. Widely used now
  2. Lighter with no extra equipment other than ties or straps
  3. Air is removed from inside the hose to make the pack more rigid and reduce bulk
  4. No pack board
  5. Packs, especially those tied with string, tend to loosen up and fall apart over time
- D. Travis Pack
  1. No strings or ties once packed
  2. Packed inside pack sack
  3. Total weight is 27 lbs.
  4. 2003 Water Handling Guide, page 137

III. Specific hose evolutions

- A. Simple hose lays
  1. Hose is advanced by adding lines behind the nozzle and lateral lines are not preconnected.
     - a. Live reel or booster line
       - i. Commonly ¾" or 1" hose on a 100 to 250 ft. reel
       - ii. A readily available charged line generally considered to be the quickest attack
       - iii. Limited flow due to hose size
       - iv. Due to the limited flow available do not count on a reel line to be the attack line or back-up in critical situations
     - b. Preconnected attack line

i. California lay, Jump line, or Minuteman

ii. 1½" line for high volume

iii. Should be double jacket hose

iv. Provides maximum flow for quick knock down and firefighter protection

v. All the hose must be pulled out before charging

vi. Should be available in pairs one being a back-up line

c. Gnas Packs

i. 2 - 100 ft. sections of 1½" hose each in a coil

ii. Uses a 1½" nozzle

iii. Uses a 1½" tee for lateral connection every 200 ft.

iv. Laterals are 1"- 100 ft. sections with a 1" combination nozzle

v. Laterals are either packed singly with the 1½" hose or in a separate pack of 3 hoses

Advantages: High pressure and volume are available for long reach and knock down potential. Minimal hose is advanced up the line. No wyes to be accidently shut off. Commercially made strap systems are available.

Disadvantages: If laterals are not installed backup protection may be exceeded. If not installed laterals must be added for mop-up. The 1½" nozzle has the potential to waste water if not carefully used. Unless shutoffs are used hose must be clamped to add the next line.

d. Pondosa Packs

i. Similar to Gnas Packs except rolled hose is used

ii. Hose is unrolled to extend it

iii. Uses a commercial strap system

B. Progressive Hoselays (Wildland hoselays)

1. Hose is systemically added to the previous hose extending the hose line while a wet line is constructed along the fire's edge and lateral lines are preconnected

a. Gansner Packs

i. A 100 ft. section of 1½" hose packed in a horseshoe

ii. A 100 ft. section of 1" hose in a coil

iii. Lines are connected with a gated wye and a reducer adapter

iv. A 1" nozzle is used

Advantages: Laterals are available every 100 ft. if needed. Trunk line can easily be shut off if needed without clamps. Low water use with 1 in. nozzle.

Disadvantages: The 1" nozzle may not be adequate for certain conditions. Each pack only extends line 100 ft. One lateral every 100 ft. may be excessive. Wyes may be shut off accidently.

b. Jarbo packs

i. 2 individual coils of 1½" hose

ii. No tees or wyes are used

iii. Used in conjunction with Gansner packs to extend the trunk line without building a wet line or installing laterals

IV. Wildland hoselay tactics

A. Start from an anchor point

B. Maintain control of the crew, as with any tactic don't start until the attack plan has been explained to the crew

C. Hose evolutions work best when they have been practiced, each person has a specific task, and predetermined communications are laid out.

D. Do not progress ahead of the lead nozzle

E. Control for spots and flare-ups which could threaten the hose or personnel

F. Back up the wet line as soon as possible with line construction

G. Pass hose under wire fences and over wooden fences

H. Lay hose on the green side of the line or away from the hot edge

I. Leave about 10% slack in the line to allow for replacement with a shorter hose and easier movement of the hose away from hazards

J. Use only as much water as needed to stop the progress of the fire but not so little as to risk loosing the hoselay from a rekindle

K. Keep hose out of dozer lines.

V. Mobile attack tactics

A. One or two simple hoselays with a moving engine

B. Must be able to drive on the burned terrain

C. Possible with as few as two personnel

D. Engine must be able to pump and roll

E. Most effective in light fuels

1. Can extinguish large lengths of fire edge with a relatively small amount of water

2. Rekindles often occur

a. Use a smooth bore tip to penetrate matted grass

b. Use a back-up line or backpack pump to extingush flare-ups

3. Smoke may impair visibility

a. Stop engine when nozzle person hits windshield with water

4. Work from inside the black and from an anchor point
5. Do not run over the hose
    a. Use an extra person to pull hose for the nozzle person